

REMARKS

These remarks are in response to the final Office Action dated September 3, 2008, which has a shortened statutory period for response set to expire December 3, 2008. A three-month extension, to expire March 3, 2009, is requested in a petition filed herewith. A Request for Continued Examination is also filed herewith.

Specification

The paragraph beginning at page 5, line 14 of the specification is amended to correct a minor grammatical error and to provide a clear basis for the terminology used in amended Claims 1, 9, 17, 27, and 39. Support for the amendments to the specification are provided at least in original Fig. 1 and original Claim 21. No new matter is entered.

Claims

Claims 1-48 are pending in the above-identified application. Claims 1-48 are rejected over prior art. Claims 1, 3-4, 8-10, 14, 17, 21, 25, 27, 32-34, 36, 39, and 46-48 are amended, and Claim 6 is canceled. Claims 2, 5, 7, 15-16, 18-20, 22-23, 26, 28-30, and 37 remain as filed, and Claims 11-13, 24, 31, 35, 38, and 40-45 remain as previously presented. Claims 49-70 are added. Reconsideration is requested.

Claim Objections

Claims 3-5 are objected to because of informalities. In particular, Claim 3 is objected to because the Examiner believes it should recite “the camera integrated circuit chip” rather than “the integrated circuit chip.” Claims 4-5 are objected to because they depend from Claim 3.

Claim 3 is amended herein as suggested by the Examiner. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objections to Claims 3-5.

Rejections Under 35 U.S.C. § 102

Claims 1-18, 20-21, 23-28, 30-41, and 46-48 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,798,031 (Honda et al.).

Claims 1-8 and 46:

With respect to Claim 1, the Examiner writes the following:

As to claim 1, Honda teaches a camera module apparatus, comprising:
a camera integrated circuit chip (comprising 10A and 12, see Fig. 5);
a lens 3; and
a molding 14A made on the camera integrated circuit chip for holding the lens 3 such that the lens is positioned in relation to the camera integrated circuit chip by the molding (C13 L62-67).

Applicants respectfully traverse.

The standard for anticipation is set forth in M.P.E.P. § 2131 as follows:

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Honda et al. does not disclose “a molding made on the camera integrated circuit chip...” as recited by Claim 1. Rather, Honda et al. discloses a housing 14A that is formed on a board 12. The board 12 is a copper plate (*Honda et al.*, col. 13, lines 29-31 and 62-67). Applicants note that a wire pattern 12a is formed on the board 12 by a photosensitive resist and an electropolishing process (col. 13, lines 37-54). However, Honda et al. provides no indication that the board 12 and the wire pattern 12a make up an integrated circuit of any kind. Moreover, the board 12 is not a chip, much less a camera chip.

Indeed, the solid-state image sensing chip 10A of Honda et al. is mounted to the housing 14A after the housing 14A is formed and the board 12 is removed. In particular, the board 12 is removed from the housing 14A by etching, leaving the wire pattern 12a on the bottom of the housing 14A (col. 14, lines 1-11). After the board 12 is removed, the solid-state image sensing chip 10A is mounted to the wire pattern 12a exposed on the bottom of the housing 14A by a conductive resin 16 (col. 14, lines 26-29). Thus, it is clear from the cited passages that Honda et al. does not disclose “a molding made on the camera integrated circuit chip,” as recited by Claim 1. Rather, in Honda et al., the image sensing chip 10A is mounted to a pre-made housing, which is in direct contrast to the present invention.

Applicants respectfully object to the characterization of the board 12 and the image sensing chip 10A collectively as an equivalent to “a camera integrated circuit chip” as recited in Claim 1 because there is no reasonable basis for doing so. The board 12 is not a part of the integrated circuit chip 10A. Furthermore, as described above, the image sensing chip 10A is not even mounted to the wire pattern 12a until after the housing 14A is formed and the board 12 is removed. Therefore, such an interpretation is unreasonable and improper under MPEP § 2111.

For the above reasons, because Honda et al. does not disclose all the limitations of Claim 1, Honda et al. does not anticipate Claim 1. Claims 2-8 and 46 depend, either directly or indirectly, from Claim 1 and are, therefore, distinguished from the cited prior art for at least the same reasons provided with respect to Claim 1.

Claims 9-16 and 47:

Claim 9 recites (in part) “a holder made at least partially on the camera integrated circuit.” Therefore, Claim 9 is distinguished from the cited prior art for at least the same reasons provided above with respect to Claim 1. Claims 10-16 and 47 depend, either directly or indirectly, from Claim 9 and are, therefore, distinguished from the cited prior art for at least the same reasons provided above with respect to Claim 9.

Claims 17-18, 20-21, 23-26, and 40-41:

Claim 17 recites (in part) “molding a receptacle over an integrated circuit.” Therefore, Claim 17 is distinguished from the cited prior art for at least the same reasons provided above with respect to Claim 1. Claims 18, 20-21, 23-26, and 40-41 depend, either directly or indirectly, from Claim 17 and are, therefore, distinguished from the cited prior art for at least the reasons provided above with respect to Claim 17.

Claims 27-28, 30-38, and 48:

Claim 27 recites (in part) “the lens assembly is positioned and rigidly affixed on the integrated circuit camera apparatus by **a lens assembly receiving apparatus made integrally on the integrated circuit camera apparatus**” (emphasis added). Therefore, Claim 27 is distinguished from the cited prior art for at least the same reasons provided above with respect to Claim 1. Claims 28, 30-38, and 48 depend, either directly or indirectly, from Claim 27 and are,

therefore, distinguished from the cited prior art for at least the same reasons provided above with respect to Claim 27.

Claim 39:

Claim 39 recites (in part) “said means for holding the lens including a component molded on the camera integrated circuit chip” (emphasis added). Therefore, Claim 39 is distinguished from the cited prior art for at least the same reasons provided above with respect to Claim 1.

For the above reasons Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 102.

Rejections Under 35 U.S.C. § 103

Claim 19 is rejected under 35 U.S.C. § 103 as being unpatentable over Honda et al. in view of U.S. Patent App. Pub. No. 2002/0191103 (Akimoto et al.). Claim 22 is rejected under 35 U.S.C. § 103 as being unpatentable over Honda et al. in view of U.S. Patent No. 7,009,654 (Kuno et al.). Claim 29 is rejected under 35 U.S.C. § 103 as being unpatentable over Honda et al. in view of U.S. Patent App. Pub. No. 2004/0109079 (Fujimoto et al.). Claims 42-45 are rejected under 35 U.S.C. § 103 as being unpatentable over Honda et al. in view of U.S. Patent No. 7,199,438 (Appelt et al.).

Applicants respectfully traverse.

Each of Claims 19, 22, 29, and 42-45 depend, either directly or indirectly, from one of Claims 17 and 27 and, therefore, include all the limitations of their respective base claim. As indicated above, Honda et al. does not teach or suggest all of the limitation of either of Claims 17 and 27. Similarly, the other cited prior art references also do not teach or suggest “molding a receptacle over an integrated circuit,” as recited by Claim 17 or “a lens assembly receiving apparatus made integrally on the integrated circuit camera apparatus,” as recited by Claim 27. Because the cited prior art do not teach or suggest all of the limitations of any of Claims 19, 22, 29, and 42-45, no prima facie case of obviousness is established with respect to any of Claims 19, 22, 29, and 42-45.

For the above reasons Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103.

Additional Amendments Made to the Claims.

Claim 1 is amended herein to recite (in part) “a spacer located within the recess and adjacent a top surface of the camera integrated circuit chip, the spacer separating the lens and the camera integrated circuit chip.” Claims 9, 17, 27, and 39 are amended to include similar limitations. Support for the newly added limitations is provided in Applicants’ original specification at least in Figs. 1, 2, and 10; page 5, line 14 to page 6, line 6; page 9, lines 3-14; page 10, lines 9-15; and in original Claim 21.

Support for the amendments made to Claims 4, 10, 21, 25, and 36 can be found at least in Figs. 1 and 10 and page 10, lines 9-15.

The limitations of Claim 6 are amended into Claim 1 and Claim 6 is canceled.

Claim 8 is amended for consistency with Claim 1.

Claim 14 is amended to delete the word “chip” to be consistent with the terminology used in Claim 9.

Claims 46-48 are amended for consistency with the current and prior amendments made to Claims 1, 9, and 27.

No new matter is added.

New Claims

New Claims 49-70 are added.

Support for Claims 49, 53, 55, 57-58, 60, 63, 65-67, and 69 is provided at least in Figs. 1 and 10; page 5, line 14 to page 6, line 6; page 9, lines 3-14; page 10, lines 9-15; and in original Claim 21.

Support for Claims 50, 54, 61, and 68 is provided at least in original Claim 21.

Support for Claims 51, 59, 62, and 65 is provided at least at page 9, lines 3-14.

Support for Claims 52, 56, 64, and 70 is provided at least at Fig. 1; page 4, line 30; and page 10, lines 9-15.

No new matter is added.

For the foregoing reasons, Applicants believe that Claims 1-5 and 7-70 are in condition for allowance. Should the Examiner undertake any action other than allowance of Claims 1-5 and 7-70, or if the Examiner has any questions or suggestions for expediting the prosecution of this application, the Examiner is requested to contact Applicants' attorney at (269) 279-8820.

Respectfully submitted,

February 27, 2009

/Larry E. Henneman, Jr./

Date: _____

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Date: February 27, 2009

/Larry E. Henneman, Jr./

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